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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Art Unit: 3732

MAKOTO NUMAKAWA et al.

Examiner: Heidi Marie Eide

Serial No.: 10/565,769

Filed:

March 9, 2006

For:

MAINTENANCE APPARATUS FOR

MEDICAL HANDPIECE

# APPEAL BRIEF

Honorable Commissioner of Patents & Trademarks P.O. Box 1450 Alexandria, VA 22313-1450

### Dear Sir:

This is an Appeal from the Final Rejection dated March 16, 2010, from the Examiner of group art unit 3732 rejecting the claims 9 through 14 of the above-identified patent application.

# **REAL PARTY IN INTEREST:**

The party named in the caption of this Brief is the inventor, however, the inventor has assigned all of his right, title and interest to J. Morita Manufacturing Corporation who is now still the owner of this invention and this patent application.

# RELATED APPEALS AND INTERFERENCES:

To the best of Appellant's and Appellant's legal representatives' or Assignee's knowledge, there are no Appeals or interferences which will directly affect or be directly affected by or have any bearing on the Board's decision in this pending Appeal.

# **STATUS OF THE CLAIMS:**

# A. Rejection of the Claims on Non-Reference Grounds:

1. The Examiner has rejected the claim 12 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as his invention. In claim 12, the recitation of positively claiming the handpiece is inconsistent with the preamble. The Applicant should clarify what subject matter the claim is drawn to, i.e. either the sub-combination of the maintenance apparatus alone or the combination of the maintenance apparatus and the handpiece.

# B. Rejection of the Claims on Reference Grounds:

- 1. The Examiner has rejected the claims 9, 10 and 14 under 35 USC 102 as being anticipated by Brown stating that Brown teaches all of the elements of the invention as claimed.
- 2. The Examiner has rejected the claims 9 through 12 and 14 under 35 USC 102 as being anticipated by Hoffman stating that Hoffman teaches all of the elements of Appellant's invention as claimed.
- 3. The Examiner has rejected the claim 13 under 35 USC 103 as being obvious over Hoffman in view of De Rocchis et al. stating that Hoffman teaches all of the present invention except for specifically teaching the nozzle having a hole for injecting the maintenance fluid in the form of a mist; De Rocchis et al. teaches a nozzle having a hole for injecting the maintenance fluid in the form of a mist; and it would be obvious to modify Hoffman in view of the teachings of De Rocchis et al.

# STATUS OF THE AMENDMENT:

Appellant filed a response dated July 16, 2010, to the Final Rejection dated March 16, 2010. The response was not entered and an Advisory Action was issued on July 28, 2010 maintaining the rejection of the Final Rejection. Accordingly the claims 9 through 14 as amended by the amendment filed December 29, 2009, are those before the Board.

# SUMMARY OF THE CLAIMED SUBJECT MATTER:

The present invention is generally a maintenance apparatus (10,100) for a medical handpiece (12) with a chucking structure (12) for detachably chucking and holding a rotary tool (39). This structure is generally shown in the Figures 1, 2A, 2B, 11, 12 and 13 and described in the text of Appellant's specification relating to these figures.

In particular and as to claim 9, it claims a maintenance apparatus 10 or 100 for (see Field of Invention) a medical handpiece 12 (see page 9, lines 7-19) with a chucking structure 52 (see page 15, lines 8 and 9) for detachably chucking and holding a rotary tool 39 (see page 13, lines 21-35) along an axis 51 and a bearing 48 and 49 (see page 15, lines 9-13) for rotatably supporting the chucking structure 52 along an axis 51 (see page 13, lines 21-25). The maintenance apparatus comprises a maintenance fluid supply nozzle 40 or 144 (see page 12, lines 10-18) fluidly connected to a second fluid supply 38 or 122, said maintenance fluid supply nozzle 40 or 144 being designed so as to be detachably connected to a chucking structure 52 or 152 (see page 12, lines 12-17) in place of a rotary tool so that the maintenance fluid is fed through the nozzle 40 or 144 (see page 12, lines 17-25) into the chucking structure 52 or 152.

Still further, in the present invention a first fluid supply 36 for feeding the maintenance fluid to a bearing 48 or 49 of the handpiece 12 is provided (see page 11, lines 21 through page 12, line 8 and page 12, lines 2-17). Still further and as is claimed by claim 11, the apparatus is provided with a connector 33 which is so designed that a handpiece is detachably connected to the connector 33 with a feeding passage 36 of the first feeding supply for feeding the maintenance fluid through the first feeding passage 36 via passage 43 to the bearing 48 or 49 of the handpiece 12 and a feeding passage 38 of the second fluid supply for feeding the maintenance fluid through the nozzle 40 to the chucking structure 52 (see page 11, line 20 through page 12, line 8 and particularly page 12, lines 2-17).

Also and as to claim 12, the maintenance apparatus is further configured such that the connector 33 has a recycling passage 37 which is so designed to be detachably connected to a feeding passage 43 of the handpiece 12 and the handpiece 12 has a recycling passage 44 which is so designed to be detachably connected to the first feeding passage 36 (see page 13, lines 2-10 and page 12, lines 3-8). Still further and as is claimed in claim 13, the nozzle 40 has at least one hole 41 or 42 for injecting the maintenance fluid in the form of a mist(see

page 12, lines 17-21). Also and is claimed by claim 14, the outer diameter of the elongated nozzle 40 is substantially equal to the outer diameter of the rotary tool 39 (see page 12, lines 12-17).

#### **REFERENCES CITED:**

## A. Brown (U.S.P. 5,520,882)

Appellant has carefully reviewed Brown and respectfully submits that Brown teaches a hygienic pharmaceutical sterilization lubricant composition 5 which is dropped into the rotary drive air feed line 11 of a dental handpiece 10 while holding the handpiece upside down (as is shown in Figure 2). In Figure 2 the composition 5 is provided in a capsule 20 and the capsule 20 is not designed so as to be detachably connected to the chucking structure in place of the rotary tool and as is described at column 4, beginning at line 65 and relating to Figure 2, the cap of the capsule 20 is removed and the capsule is merely squeezed to allow a dosage of about ½ cc of the composition 5 to enter the main hole 11 of the handpiece 10 while the handpiece 10 is inverted. Still further and in conjunction with Figure 4, two drops of the composition 5 are dropped from the capsule 30 to the rotary tool in the bur hole 12 before using the handpiece 10 (see particularly column 5, lines 1-6 and lines 13-17).

## B. Hoffman (U.S.P. 5,165,503)

Appellant has carefully reviewed Hoffman and respectfully submits that Hoffman discloses a method and apparatus for lubricating and disinfecting dental drills and particularly as is shown in Figures 7 and 8, includes an intermediate coupler or adapter 210 wherein a disinfectant spray container 300 is connected to a conduit 238 of the adapter 210 via a nozzle 248. The adapter 210 allows connection to the air and water passages of the handpiece 213. Still further and as is shown in Figures 1, 2 and 3 of Hoffman, the adapter 11 also connects to the air and water lines of the handpiece 13 and the lubricating fluid is connected to the conduit 38 of the adapter 11. Clearly neither of the nozzle 248 or the adapter 11 or 211 is detachably connected to the chucking structure of the handpiece 13 as a replacement for the rotary tool 204. Still further, it does not disclose that the nozzle would have at least one hole for

injecting the maintenance fluid in the form of a mist or that the elongated nozzle would have an outer diameter substantially equal to the outer diameter of a rotary tool.

# C. <u>De Rocchis et al. (U.S.P. 4,990,087)</u>

Appellant has carefully reviewed De Rocchis et al. and respectfully submits that De Rocchis et al. teaches a dental tool maintenance apparatus and as is clearly shown in Figure 3B of De Rocchis et al. and described at column 3, lines 38-41, the disinfectant is dispensed as a mist so as to only contact the exterior portion of the tool and there is no teaching that the nozzle 74 would be detachably connected to the chucking structure in place of a rotary tool as is required by Appellant's claimed invention.

### GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL:

- A. Rejection of the Claims on non-reference grounds:
- 1. Claim 12 is rejected under 35 USC 112, second paragraph as being indefinite. Appellant has responded to this rejection stating that the invention is directed towards the maintenance apparatus alone and respectfully requests that the claims be considered in this manner.
- B. Rejection on reference grounds:
- 1. Claims 9 and 10 through 14 are rejected under 35 USC 103 as being anticipated by Brown and it is Appellant's position that Brown does not disclose each and every element of Appellant's invention as claimed by the claims 9 and 10 through 14.
- 2. The claims 9 and 10 through 14 are rejected under 35 USC 102 as being anticipated by Hoffman and it is Appellant's position that Hoffman does not disclose each and every element of Appellant's invention as claimed.
- 3. The claim 13 is rejected under 35 USC 103 as being obvious over Hoffman in view of De Rocchis et al. and it is Appellant's position that not only is the combination suggested by the Examiner not Appellant's invention but also the combination suggested by the Examiner would not be suggested to one of ordinary skill in the art.

#### ARGUMENT:

A. In reply to the rejection under 35 USC 112, second paragraph, Appellant has previously addressed this issue in Appellant's Response to the Final Rejection which was not entered by the Examiner. Appellant respectfully submits that the claims are only drawn to the maintenance apparatus alone and should be interpreted and considered as such.

# B. The rejection of claims 9, 10 and 14 under 35 USC 102 as being anticipated by Brown

It is the Examiner's position that Brown teaches each and every element of Appellant's invention and particularly teaches a chucking structure for detachably chucking and a holding rotary tool along an axis and a bearing for rotary supporting the chucking structure along the axis and comprises a maintenance fluid supply nozzle connected to a second fluid supply, the design of the nozzle is capable of being detachably connected to the chucking structure in place of the rotary tool so the maintenance fluid is fed through the nozzle into the chucking structure as is illustrated in Figure 4, but does not specifically teach the device functioning as claimed. However, the nozzle connected to the fluid supply 30 is capable of being detachably connected to the chucking structure therefore the claim limitations are met.

Appellant respectfully submits that as part of the Examiner's rejection under 35 USC 102, the Examiner has made at least two assumptions and modifications to the art relied upon. In particular the Examiner assumes that the design of the capsule 30 makes it capable of being detachably connected to the chucking structure in place of the rotary tool. Appellant respectfully submits that there is no such suggestion or disclosure in Brown and Brown specifically teaches that the maintenance fluid is dropped onto the chucking structure with the rotary tool in place (as is shown in Figure 4). In addition and as is shown in Figure 2, the composition 5 from the capsule 20 is dropped into the inlet 11 and there is no detachable connection and again there is no suggestion, teaching or showing in Brown that one would remove the rotary tool from the chucking structure and detachably insert a nozzle. Still further, Appellant

respectfully submits that there is no suggestion, showing or teaching in Brown as is shown in Figures 2 and 4 thereof that the diameter of the elongated nozzle would be equal to the outer diameter of the rotary tool, as is claimed by Appellant's claim 14.

In summary, Appellant respectfully submits that Brown does not disclose a maintenance fluid supply nozzle fluidly connected to a second fluid supply wherein the maintenance fluid supply nozzle is designed to be detachably connected to a chucking structure in place of the rotary tool or that the maintenance fluid supply nozzle would comprise an elongated nozzle having an outer diameter substantially equal to the outer diameter of the rotary tool. Therefore, Appellant respectfully submits that Brown does not disclose each and every element of Appellant's invention as claimed by the claims 9, 10 and 14.

# C. Claims 9 through 12 and 14 are rejected under 35 USC 102 as being anticipated by Hoffman

The Examiner suggests that the maintenance apparatus comprises a maintenance fluid supply nozzle 248 capable of being fluidly connected to a second fluid supply, the supply nozzle being capable of being detachably connected to a chucking structure in place of a rotary tool so that a maintenance fluid is fed through nozzle into the chucking structure.

In reply and as discussed above concerning the teachings of Hoffman, Appellant respectfully submits that Hoffman requires an adapter 11, 211 which is connected to the handpiece in order to lubricate and disinfect the handpiece. Still further, the maintenance fluid is connected to the adapter and does not include an elongated nozzle that can be inserted into the chucking structure in place of the rotary tool. Still further, Appellant respectfully submits that it is impossible for Hoffman to be capable of functioning as the apparatus claimed. Particularly, Appellant respectfully submits that there is no disclosure, suggestion or teaching in Hoffman in any place or manner that an elongated nozzle is inserted into the chucking structure in place of the rotary tool.

Still further, Appellant respectfully submits that the construction of the claims 11 and 12 which feature a connector that includes feeding passage 36 and feeding

passage 38 which is separate from the feeding passage 36 wherein the feeding passage 36 supplies the maintenance fluid to the bearings 48 and 49 while the feeding passage 38 supplies maintenance fluid to the chucking structure 52 via the nozzle 40 that is connected to the passage 38.

Accordingly, Appellant respectfully submits that Hoffman does not disclose each and every element of Appellant's invention as claimed and the claims 9 through 12 and 14 are not anticipated by Hoffman.

# D. <u>Claim 13 is rejected under 35 USC 103 as being obvious over Hoffman in</u> view of De Rocchis et al.

The Examiner states that Hoffman teaches all of the invention substantially as claimed but does not specifically teach the nozzle having a hole for injecting maintenance fluid in the form of a mist; De Rocchis et al. teaches a nozzle having a hole for injecting the maintenance fluid in the form of a mist; and it would be obvious to modify Hoffman in view of the teachings of De Rocchis et al.

In reply to this rejection, Appellant would like to incorporate by reference his comments above concerning Appellant's invention as claimed by the claims 9 through 12 and Hoffman. In addition, as discussed concerning De Rocchis et al. in the discussion entitled References Cited, Appellant respectfully submits that De Rocchis et al. teaches a mister which merely sprays disinfectant on the exterior of the handpiece for disinfecting the exterior of the handpiece and there is no showing, suggestion or teaching in De Rocchis et al. that the nozzle could be provided such that it could be inserted into the chuck structure instead of the rotary tool. In addition, Appellant respectfully submits that, as stated above, Hoffman also does not teach a nozzle which is inserted into the chuck structure in place of the rotary tool.

In view of the above, Appellant respectfully submits that the combination suggested by the Examiner is not only not Appellant's invention but also the combination would not be suggested to one of ordinary skill in the art and the claim 13 is not obvious over Hoffman in view of De Rocchis et al.

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# **CONCLUSION:**

The finally rejected claims 9 through 14 of Appellant's application are respectfully submitted as clearly allowable for the reasons as set forth as follows:

- 1. Claims 9 through 14 are not obvious nor anticipated by the cited art.
- 2. The allowance of the claims 9 through 14 earnestly solicited.
- 3. An oral hearing is not requested.
- 4. Submitted herewith are three (3) copies of the Appeal Brief and it is respectfully requested that the fee for filing the Appeal Brief in the amount of \$270.00 (Fee Code: 2402) be charged to QUINN EMANUEL DEPOSIT ACCOUNT NO. 50-4367.

Please charge any additional costs incurred by or in order to implement this Appeal Brief or required by any requests for extensions of time to QUINN EMANUEL DEPOSIT ACCOUNT NO. 50-4367.

Respectfully submitted,

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# **CLAIMS APPENDIX**

# THE REJECTED CLAIMS UPON WHICH APPEAL IS TAKEN:

Claims 1-8 (canceled).

Claim 9: A maintenance apparatus (10, 100) for a medical handpiece (12) with a chucking structure (52) for detachably chucking and holding a rotary tool (39) along an axis (51) and a bearing (48,49) for rotatably supporting the chucking structure (52) along the axis (51); comprising:

a maintenance fluid supply nozzle (40, 144) fluidly connected to a second fluid supply (38, 122), said maintenance fluid supply nozzle (40, 144) being designed so as to be detachably connected to a chucking structure (52, 152) in place of a rotary tool (39) so that the maintenance fluid is fed through the nozzle (40, 144) into the chucking structure (52, 152).

Claim 10: The maintenance apparatus (10, 100) of claim 9, further comprising a first fluid supply (36) for feeding the maintenance fluid to a bearing (48,49) of the handpiece (12).

Claim 11: The maintenance apparatus of claim 10, further comprising a connector (33) which is so designed that a handpiece (12) is detachably connected to the connector (33), the connector (33) having a feeding passage (36) of the first fluid supply for feeding the maintenance fluid through the first feeding passage (36) to the bearing (48,49) of the handpiece (12) and a feeding passage (38) of the second fluid supply for feeding the maintenance fluid through the nozzle (40) to the chucking structure (52).

Claim 12: The maintenance apparatus of claim 11,

wherein the connector (33) has a recycling passage (37) which is so designed to be detachably connected to a feeding passage (43) of the handpiece (12) and said handpiece (12) has a recycling passage (44) which is so designed to be detachably connected to said first feeding passage (36),

when the handpiece (12) is connected to the connector (33), the maintenance fluid can be fed through the feeding passages (36, 43) of the connector (33) and the handpiece (12) to the bearing (48, 49) of the handpiece (12) and then collected together with said maintenance fluid fed through said supply nozzle (40) through the recycling passages (37, 44) of the connector (33) and the handpiece (12).

Claim 13: The maintenance apparatus according to any one of claims 9 to 12, wherein the nozzle (40) has at least one hole (41, 42) for injecting the maintenance fluid in the form of mist.

Claim 14: The maintenance apparatus according to claim 9, wherein said maintenance fluid supply nozzle comprises an elongated nozzle having an outer diameter substantially equal to an outer diameter of said rotary tool, said elongated nozzle having one end portion for insertion into said chucking structure and another end portion for being coupled to said second fluid supply.

# **EVIDENCE APPENDIX** (none)

# RELATED PROCEEDING APPENDIX (none)